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EXAMINER	
LEE, LAURA MICHELLE	
ART UNIT	PAPER NUMBER
3724	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,874	BENVENUTI ET AL.	
	Examiner	Art Unit	
	LAURA M. LEE	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-12,15,17-26,44 and 47-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-12,15,17-26,44 and 47-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/27/2009 has been entered. Currently claims 1, 2, 4-12, 15,17-26, 44, 47-51 are pending, claims 48-51 are new, and claims 1,9,10,11,15, 20 and 47 are currently amended and claim 25 is withdrawn.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 2, 4-12, 15,17-24,26, 44, 47-50, 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 48, 49, and 50 all recite "…a reciprocal position of said flexible member and of said longitudinal lower supporting element being such…", where it was previously recites that the longitudinal supporting element was "bridging said input and output member." As shown in Figures and detailed in the specification, ref. 21

is the longitudinal supporting element that bridges the input and output member, however, it is a stationary structure that does not reciprocate. The specification even discloses that the element 21 is fixed (see page 11, line 11). It is not understood in what aspects the applicant is considering the element possessing reciprocal positioning.

Independent claim 51, line 8 discloses that a "stationary lower supporting member" and than discloses in lines 11-12, "a reciprocal position of said flexible member and of said longitudinal lower supporting element being such…". As the supporting member is stationary, it cannot also be considered to reciprocate, the scope of the claim is therefore not understood entirely.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 49 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Wierschke (U. S. Patent 5,458,033). As best understood, in regards to claims 49 and 50, Wierschke discloses a device (Figure 2) to eliminate trimmings or scraps from series of products comprising at least one continuous movable flexible member (i.e. at least one of belts, 24/25/26) carrying a series of contact members (i.e. pads, 27/28) for the products (R) aligned with one another, a section of said movable flexible member (4) being devoid of said contact members (see Figure 2, not numbered) to allow trimmings

(Ad) to fall (Figures 8A-8L); at least one longitudinal lower supporting element (exit conveyor, associated with vacuum box 40; see Figure 2) for the products, parallel to said movable flexible member (i.e. 24/25/26), a reciprocal position of said flexible member and of said longitudinal supporting element being such that the products advance in contact with and supported during elimination of said trimmings (Ad) by the contact members (i.e. 27/28) of the flexible member and of the longitudinal lower supporting element (exit conveyor, associated with vacuum box 40; see Figure 2); at least one pusher (pusher, 17) to insert the series of products (R) with respective trimmings (Au, Ad) between said flexible member (i.e. one of 24/25/26) and said lower longitudinal supporting element (exit conveyor, associated with vacuum box 40; see Figure 2); wherein said flexible member (i.e, one of 24/25/26) is controlled with a cyclically variable speed (servo drive, 31 and maser phaser, 34, see col. 4 lines 46-63 and col. 5, lines 29-36,) to carry the section thereof devoid of contact members every time to the level of the tail and head trimmings (Ad) of two consecutive series of products (R) (col. 5, lines 6-35);

Wherein such that every time a new series of products is introduced into the device, said section of flexible member devoid of contact members is capable of being phased with positioning of tail and head trimmings of two consecutive series of product (via servo drive, 31 and maser phaser, 34, see col. 4 lines 46-63 and col. 5, lines 29-36)

Wherein at least one of said contact members is constructed and arranged to cyclically mechanically grip and release at least a last product of said series of products (see col. 6, lines 8-15).

6. Claim 51 is rejected under 35 U.S.C. 102(b) as being anticipated by Wierschke (U. S. Patent 5,458,033). As best understood, in regards to claims 51, Wierschke discloses a device (Figure 2) to eliminate trimmings or scraps from series of products comprising an input member (roll mover 11) for the products; an output member (i.e. rails 15; aid in carrying out the product/rolls) for the products; at least one continuous movable flexible member (i.e. at least one of belts, 24/25/26) carrying a series of contact members (i.e. pads, 27/28) for the products (R) aligned with one another, a section of said movable flexible member (4) being devoid of said contact members (see Figure 2, not numbered) to allow trimmings (Ad) to fall (Figures 8A-8L); at least one longitudinal stationary lower supporting element (rails, 14) for the products, parallel to said movable upper flexible member (i.e. 24/25/26) and bridging (see Figure 8F-8G) said input (mover 11) and out put member (i.e. rails 15), a reciprocal position of said flexible member and of said longitudinal supporting element being such that the products advance in contact with and supported by the contact members (i.e. 27/28) of the flexible member and of the longitudinal lower supporting element (exit conveyor, associated with vacuum box 40; see Figure 2); at least one pusher (pusher, 17) to insert the series of products (R) with respective trimmings (Au, Ad) between said flexible member (i.e. one of 24/25/26) and said lower longitudinal supporting element (14); wherein said flexible member (i.e, one of 24/25/26) is controlled with a cyclically variable speed (servo drive, 31 and maser phaser, 34, see col. 4 lines 46-63 and col. 5, lines 29-36,) to carry the section thereof devoid of contact members every time to the level of

the tail and head trimmings (Ad) of two consecutive series of products (R) (col. 5, lines 6-35);

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-2, 4-11, 15,17-19, 24, 26, and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wierschke (U. S. Patent 5,458,033) in view of Perini (GB2137918). As best understood, in regards to claims 1 and 48 Wierschke discloses a device (Figure 2) to eliminate trimmings or scraps from series of products comprising an input member (input conveyor, 11, see Figures 8) for the products; an output member (output conveyor near vacuum box 44, see Figures 8) for the products; at least one continuous movable upper flexible member (i.e. at least one of belts, 24/25/26) carrying a series of contact members (i.e. pads, 27/28) for the products (R) aligned with one another, a section of said movable flexible member (4) being devoid of said contact members (see Figure 2, not numbered) to allow trimmings (Au, Ad) to fall (Figures 8A-8L); at least one longitudinal lower supporting element (i.e. rails, 15a/15b) for the products, parallel to said upper movable flexible member (i.e. 24/25/26) and bridging said input and said output member (input and output conveyors) a reciprocal position of

said flexible member and of said longitudinal lower supporting element being such that the products advance in contact with and supported by the contact members (i.e. 27/28) of the flexible member and with the longitudinal lower supporting element (i.e. 15a/15b); at least one pusher (pusher, 17) to insert the series of products (R) with respective trimmings (Au, Ad) between said flexible member (i.e. one of 24/25/26) and said longitudinal lower supporting element (i.e. 15a/15b or 14 or another of 24/25/26); wherein said flexible member (i.e, one of 24/25/26) is controlled with a cyclically variable speed (servo drive, 31 and maser phaser, 34, see col. 4 lines 46-63 and col. 5, lines 29-36,) to carry the section thereof devoid of contact members every time to the level of the tail and head trimmings (Au, Ad) of two consecutive series of products (R) (col. 5, lines 6-35);

Wherein such that every time a new series of products is introduced into the device, said section of flexible member devoid of contact members is capable of being phased with positioning of tail and head trimmings of two consecutive series of product (via servo drive, 31 and maser phaser, 34, see col. 4 lines 46-63 and col. 5, lines 29-36)

Wherein at least one of said contact members is constructed and arranged to cyclically mechanically grip and release at least a last product of said series of products (see col. 6, lines 8-15).

Wierschke does not disclose that the longitudinal lower supporting members (15a/15b) are in contact with and support the products during elimination of the trimmings, as Wierschke discloses that the supporting members pivot open to discard the trimmings and therefore are not in contact at that moment with the product.

However, attention is alternatively directed to the Perini device to eliminate trimmings or scraps from series of products of toilet paper. Perini discloses that the paper products are similarly conveyed by a reciprocating supporting gripping means, that has a void in the supporting portion and also by a bottom supporting conveying means (5) that is offset along the center of the products (see Figure 3). This void and offset supporting means allows the trimming ends to fall away from the desired product, instead of using a mechanical means and control system to pivot open the bottom supporting means as shown by Wierschke. Although the bottom supporting means is constantly in contact with the products and trimmings alike, when the trimming portion enters the void in the reciprocating supporting gripping means it is allowed to fall away from the desired sections. It similarly would have been obvious to one of ordinary skill in the art to have utilized a different bottom supporting means such as the belt conveying means (5) of Perini with the reciprocating supporting gripping means of Wierschke such that when the absence in the Wierschke supporting means encountered the trimming section, the trimmings would fall on their own away from the desired sections without requiring the additional setup of a mechanically operated and controlled pivoting means.

In regards to claim 2, the modified device of Wierschke discloses that the longitudinal supporting element (fixed supporting rails, 14) is stationary. It is also noted conveying direction.

In regards to claim 3, the modified device of Wierschke disclose that said continuous flexible member (i.e. 24/25/26) has at least one first contact member (i.e. a

first foraminous portion of 27/28) designed to grasp at least a last product (Ru) of each series and make the last product advance. (Figure 8A-8L)

In regards to claim 4, the modified device of Wierschke discloses wherein said continuous flexible member (i.e. one of 24/25/26) has at least one second contact member (i.e. a second portion of 27/28) designed to grasp at least a first product of each series (Rd) and make the first product advance. (Figure 8A-8L).

In regards to claim 5, the modified device of Wierschke discloses wherein at least some of the contact members (i.e. 27/28) are provided with a contact surface for the products having a low friction coefficient (low is a relative term), to allow said products to slide with respect to said at least one longitudinal supporting element (15a/15b).

In regards to claim 7, the modified device of Wierschke discloses wherein said flexible member (i.e.one of 24/25/26) is controlled at a variable speed to accelerate, at least a last product of each series with respect to the pusher (17) threrebehind (col. 7, lines 25-35)

In regards to claim 7, the modified device of Wierschke discloses wherein said flexible member (i.e. one of 24/25/26) is controlled at a variable speed to accelerate, and optionally subsequently decelerate at least a first product of each series with respect to a subsequent product (col. 4, lines 48-50; col. 7, lines 25-35)

In regards to claim 8, the modified device of Wierschke discloses wherein said flexible member (i.e. one of 24/25/26) is controlled to advance at a lower speed or to stop during an interval of time between arrival of a first product and arrival of a last product of each series, during said interval of time the products being pushed by said

pusher (17) and sliding along the flexible member (i.e. 24/25/26) resting on the contact members (15a/15b).

In regards to claim 9, the modified device of Wierschke discloses wherein one or more of said contact members (i.e. 27/28) disposed at each end of a series of contact members carried by the flexible member (i.e. 24/25/26), adjacent to said portion of the flexible member devoid of contact members, can be operated to have a grasping effect of the products (R) in contact therewith (see Figures 8A-8L).

In regards to claim 10, the modified device of Wierschke discloses wherein said contact members (alternatively mechanical fingers; see col. 6, lines 8-15) deigned to grasp said products (R) are mounted movable (pinching direction), with respect to the flexible member which carries the contact members at least in a direction essentially orthogonal to said flexible member.

In regards to claim 11, the modified device of Wierschke discloses wherein the contact members (i.e. 27/28) designed to grasp the products have a movable portion. The whole contact member is a movable portion about the belts 24/25/26.

In regards to claim 15, the modified device of Wierschke discloses wherein said flexible member (i.e. one of 24/25/26) is laterally staggered with respect to said longitudinal supporting element (14).

In regards to claim 17, the modified device of Wierschke discloses wherein said flexible member (i.e. 24/25/26) is controlled to be accelerated synchronously with a position of said pusher (17), to distance a last product (Ru) of each series from the pusher there behind (col. 4, lines 48-50).

In regards to claim 18, Wierschke discloses wherein said flexible member (i.e. 24/25/26) is controlled to be accelerated synchronously with a position of said pusher (17), to distance a first product (Rd) of each series at least temporarily from a subsequent product (Figure 8B).

In/ regards to claim 19, Wierschke discloses wherein said flexible member (i.e. 24/25/26) includes a pair of parallel chains (chains/belts, 24/25/26; col. 6, lines 7-12), one of said chains (24/25/26) being provided with a plurality of intermediate contact members (an intermediate portion of 27/28), said intermediate contact members being arranged in a laterally staggered position with respect to said longitudinal supporting element (14).

In regards to claim 24, Wierschke discloses wherein at least one of said first contact member or said second contact member designed to grasp said products includes jaws or pliers-shaped grasping members (alternatively mechanical fingers; see col. 6, lines 8-15).

In regards to claim 26, Wierschke discloses wherein said products are rolls (R) obtained from cutting a log (see abstract).

In regards to claim 47, Wierschke discloses wherein said at least one of said contact members (27/28) is structured to cyclically co-act with an activation member (vacuum 44) to mechanically grip (Figure 8C) and release (Figure 8J) said at least a last product (Ru) of said series of products.

9. Claims 12, 20-23, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wierschke in view of Perini (GB2137918) and in further view of Spencer (U.S. Patent 4,033,862).

Wierschke discloses that the contact members are comprised of a vacuum system, and as such does not disclose a system of contact members movable mounted orthogonal to the flexible member, acted on by a fixed control profile, comprised of shoes or jaw shaped grasping members. However, Wierschke does recognize that it is feasible to replace the vacuum aspect of the invention with random mechanical fingers in a short area on each of the two belt or chain systems per lane and still retain the new quick product variability (col. 6, lines 8-15). However, Wierschke does not provide detail as to the structure of the mechanical fingers. Attention is therefore directed to the Spencer device that discloses a similar apparatus for conveying wound rolls wherein defective rolls are discarded / allowed to fall away from the contact members or finger grippers. One having ordinary skill in the art would have recognized the applicability of utilizing the Spencer finger grasping members as anticipated by Wierschke to similarly grasp and transport the rolls along the conveyor.

Therefore, in regards to claim 12, the Wierschke device as modified by Spencer discloses wherein a fixed control profile (Spencer; cam followers 53/54) acts on said movable portions (Spencer, fingers, 31/32/33), an elastic element (Spencer; spring, 43) being provided to hold each of said movable portions (19) in contact with said fixed control profile.

In regards to claim 20, the Wierschke device as modified by Spencer discloses wherein said first contact member (Spencer grippers, 19) designed to grasp the last product (Ru) (see Wierschke Figures 8A-8L) of each series of products includes two shoes (i.e. Fingers, 31/32/33) and means are provided to control a grasping motion of said shoes (i.e. cams followers 53/54, springs 43).

In regards to claim 21, the Wierschke device as modified by Spencer discloses wherein said second contact member (Spencer grippers, 19) designed to grasp at least the first product (Rd) of each series of products includes two shoes (i.e. Fingers, 31/32/33) and means are provided to control a grasping motion of said shoes (i.e. cams followers 53/54, springs 43).

In regards to claim 22, the Wierschke device as modified by Spencer discloses wherein the two shoes (i.e. Fingers, 31/32/33) of said first contact member are controlled by a fixed cam profile (cam followers, 53/4), which controls a closing motion of said shoes.

In regards to claim 23, the Wierschke device as modified by Spencer discloses wherein said flexible member (i.e. 24/25/26) includes a pair of parallel chains (i.e. chains/belts, 24/25/26; col. 6, lines 7-15 / Spencer 20/21), one of said chains being provided with a plurality of intermediate contact members (mechanical fingers, Wierschke col. 6, lines 8-15 / Spencer fingers 31/32/33), said intermediate contact members being arranged in a laterally staggered position with respect to the longitudinal supporting element (i.e. 15a/ 15b) and wherein each shoe of said first contact member is carried by a respective one of said chains (i.e. 24/25/26 / Spencer 20/21).

In regards to claim 44, the Wierschke device as modified by Spencer discloses wherein said flexible member (i.e. 24/25/26) includes a pair of parallel chains (i.e. 24/25/26 / Spencer 20/21), one of said chains being provided with a plurality of intermediate contact members (mechanical fingers, Wierschke col. 6, lines 8-15 / Spencer fingers 31/32/33), said intermediate contact members being arranged in a laterally staggered position with respect to the longitudinal supporting element (i.e. 15a/ 15b) and wherein each shoe of said first contact member is carried by a respective one of said chains (i.e. 24/25/26 / Spencer 20/21).

Response to Arguments

10. Applicant's arguments with respect to claims 1-2, 4-12, 20-23, 44, 47-48 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed 4/21/2009, in regards to claims 49-51 have been fully considered but they are not persuasive. In regards to applicant's contention that Wierschke does not disclose an upper and lower parallel supporting elements to support the products during the elimination of the trimmings, at least in response to claims 49 and 50, it is noted that the output conveyor can be considered a lower supporting element that is parallel to the upper flexible member (i.e. one of belts 24/25/26), that supports the products, if not the trimmings, during elimination of at least the end trimmings(Au) (see at least Figures 8A-8D).

In regards to applicant's contention that Wierschke does not disclose a stationary lower supporting element that bridges the input and output members, it is noted that at

least according to claim 51, that the rails 14, are stationary and can be considered a stationary lower supporting element that span or bridge a distance between an input (mover 11) and rails 15, which constitute an output member.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/
Examiner, Art Unit 3724
7/06/2009